

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

ORIGINAL
FILE

RECEIVED

JUN 10 1992

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In re)
)
Amendment of Section 90.494) RM-7986
of the Commission's Rules)
and Regulation concerning)
shared use of 900 MHz)
Paging Frequencies)

To: The Commission

COMMENTS IN OPPOSITION
TO PETITION FOR RULE MAKING

Dial Page, L.P. ("Dial Page"), by its attorneys, and pursuant to Section 1.401 et seq. of the Commission's Rules and Regulations, submits these comments in opposition to the Petition for Rule Making filed April 24, 1992 by the Association for Private Carrier Paging Section of the National Association of Business and Educational Radio, Inc. ("NABER"), and shows the following:

1. Dial Page is a provider of paging services to more than 185,000 customers in the southeastern United States. Dial Page provides these services on both Public Mobile Service ("PMS") and Private Carrier Paging ("PCP") channels. Dial Page has a long standing commitment to private carrier paging. Indeed it provides service in all three PCP frequency ranges (150, 460 and 900 MHz).^{1/} And a recent industry journal ranked Dial Page as the fourth largest PCP carrier in the nation. Thus, Dial Page is in a unique position to provide insight into NABER's proposal.

^{1/} Among other facilities, Dial Page currently operates a multistate 462 MHz PCP system with more than 50 transmitters.

No. of Copies rec'd 045
List A B C D E

After having carefully evaluated NABER's proposal, Dial Page must urge the Commission not to adopt it for the following reasons.

2. NABER advances its proposal as a method of promoting the growth of 900 MHz PCP systems and preventing certain problems which it asserts have developed concerning channel sharing in the bands below 900 MHz. Preliminarily, Dial Page is concerned that NABER has not sufficiently demonstrated what, if any, problems have developed from channel sharing. Although obviously the elimination of channel sharing will also eliminate any problems which may have arisen from channel sharing, NABER's petition fails to make any showing that significant channel sharing problems have developed, much less to make a sufficient showing that they are so serious as to require such a drastic remedy as eliminating frequency sharing. More importantly, NABER's proposal promises to create other problems which will likely hinder, rather than help, the development of the PCP service.

3. To that end, Dial Page is unconvinced of NABER's major premises that channel sharing is either inefficient or unworkable. To the contrary, Dial Page's experience confirms that the present system is not broken and does not, therefore, need to be fixed. Dial Page has admittedly occasionally encountered a problem where shared frequencies have resulted in some interference. However, Dial Page has been able in those instances to resolve these problems by agreement with the carriers involved. NABER's petition, while suggesting a serious interference problem exists, fails to provide any data concerning

either the degree of the problem, or proof that the problem is irremediable without adoption of its proposal. Both of these omissions are serious deficiencies in its petition.

4. Dial Page also disagrees with NABER's assertion that shared frequencies are inefficient. The rationale for sharing frequencies is to achieve efficient channel use by requiring multiple users to aggregate traffic on a single channel. NABER's petition does not address how that goal is not now being realized, nor how its proposal would continue to accommodate that goal. Rather, the only mention of spectral efficiency in the petition is NABER's bare assertion that "all methods of sharing a frequency inevitably restrict the maximum number of pagers a frequency can accommodate." Petition at 4. That assertion, however, does not follow, because, shared or not, there are a limited number of users which any channel can accommodate. Sharing frequencies can increase spectrum efficiency by allowing the maximum number of users to be accommodated and the PCP channel to be fully loaded, and most importantly, removing any incentive to warehouse frequencies.^{2/} Spectrum efficiency is not increased by allocating PCP channels without regard to the traffic PCP carriers will load onto those channels. Thus, adoption of NABER's proposal -- contrary to its argument -- is likely to lower, not increase, spectrum efficiency.

^{2/} Dial Page, of course, distinguishes a fully loaded channel from a congested channel. It is NABER's responsibility, as a frequency coordinator, to coordinate usage of channels so that they are fully -- but not excessively -- utilized.

5. Indeed, it appears to Dial Page that concerns of spectral efficiency play little part in NABER's proposal. Rather, the NABER proposal seems to emphasize the creation of nationwide and regional PCP networks. Nothing in the rules currently restricts the nationwide or regional use of PCP frequencies. In fact, as Dial Page explained earlier, it is an operator of such a regional system, using a shared frequency. NABER has made no showing that a regional or a nationwide system cannot be created and operated efficiently on a shared frequency. Dial Page believes it would be spectrally inefficient to tie-up a frequency for exclusive use for a nationwide or a regional system without a convincing showing of the need to do so. The Commission ought not, therefore, without that clear demonstration of need, modify its rules to encourage the inefficient use of valuable spectrum.

6. There are currently three nationwide PMS paging frequencies. To Dial Page's understanding, only one of those three channels is fully loaded. Moreover, there are 37 931 MHz PMS channels available for the creation of regional systems on an exclusive basis. There is simply no need that NABER has shown to create more exclusive allocations just for the creation of regional or national paging networks.

7. Given the lack of a demonstrated need for the reallocation of PCP spectrum from shared to exclusive use, the creation of exclusive frequency assignments will severely harm the very persons for whom PCP channels are most valuable, small

carriers and start up companies. They stand to be frozen out of the business by (1) the existing 900 MHz PCPs which would automatically be given protection under the NABER buildout proposal^{3/} and (2) by the inevitable wave of speculators which would be let loose to gum up this Commission's processes by the PCP frequency grab NABER's proposal would launch.

8. If this Commission has learned anything in the last ten years, it is that any mass award of exclusive spectrum rights is quickly met with a massive wave of speculators -- conjured up by the application mills -- whose goal is not public service, but rather profiting from the scarcity value of the spectrum awarded. The Common Carrier Bureau has seen this happen in the case of cellular and MMDS. The Mass Media Bureau has seen this happen in the hearings following the Docket 80-90 FM allocations. And the Private Radio Bureau has seen this happen most recently in the 220 MHz filings. Indeed, the 220 MHz filing experience is quite instructive. Without one whit of scarcity in most areas of the country, the Commission's lottery approach and the application mills combined to create such a groundswell of speculation that the Bureau is yet to set for lottery, much less award, even one license, given the enormous task of processing the more than 50,000 applications filed.

^{3/} Indeed, the NABER proposal is inherently discriminatory in favor of large, well financed paging concerns and against small, modestly capitalized startup companies. The Commission ought not in these tough economic times throw unnecessary roadblocks to entry in the path of startup enterprises.

9. If the Commission awards exclusive use of 900 MHz PCP frequencies, there is no doubt that the application mills and the speculators will quickly tie up all available spectrum in the hope of turning a quick profit. While NABER appears to recognize at least the possibility that there will be a tendency for hoarding of these frequencies, the only mechanism NABER can posit to prevent this abuse is to require appropriate buildout. Although the requirement may be marginally helpful, Dial Page doubts it will have any real salutary effect. If the experience gained with the 900 MHz PMS frequencies is any indication, requiring system buildout will only result in near empty PCP systems "operating" while speculators wait for a good offer.

10. Indeed, Dial Page's own experience in creating a 900 MHz wide-area, multistate PMS system is telling. Dial Page has been hindered in its efforts to create this system by operators who are licensed for its target frequency, but who are making no real effort to market the frequency. Likewise, Dial Page is aware of other instances, including cases in some of the larger cities in the nation, where 900 MHz PMS frequencies have been licensed to carriers who after constructing those facilities, decided that the best economic use was to let the channels remain essentially unused while their spectrum value appreciated.^{4/} The

^{4/} For example, a frequency search of 900 MHz PMS channels within a 20 mile radius of the District of Columbia reveals that of the 37 non-nationwide 931 MHz PMS channels, all but three have been allocated. Some have been authorized and apparently expired unbuilt. Yet, the District of Columbia Yellow Pages indicates only 27 total entries for paging (continued...)

Commission has limited enforcement capability. It is not going to be able to ensure that PCP carriers obtaining exclusive use of a frequency do in fact provide service. Warehousing is bound to occur in light of this fact. Frequency sharing, by contrast, removes any incentive for warehousing because it prevents artificial scarcity of spectrum.

11. The 900 MHz PCP frequencies which are not now being fully used are in essence the reserve spectrum for PCP users of the future. The Commission should not be upset that this spectrum is not now fully utilized. As demand for PCP service grows, it is important that spectrum be available to fulfill that demand. Should the Commission set off a spectrum grab for these frequencies, this current reserve will quietly be gobbled up in speculation. The small startup or existing PCP companies who actually need the spectrum for future expansion will be the losers from that spectrum rush as they will be frozen out of the industry; the Commission, which will have to process speculative applications and police the speculators, will also be the loser. But the biggest loser will be the public because it will suffer from the higher cost of PCP service as a result of the profits paid to the speculators and it will suffer from degraded service as a result of the delay the Commission will

4/ (...continued)

companies providing service in the District. Thus, even assuming they all are licensed for 931 MHz (which is extremely unlikely), it is clear that substantial warehousing is occurring of those channels which were licensed in the mid-80's.

experience from processing thousands of speculative applications.

12. Moreover, should available frequency in the 900 MHz band be tied up by speculation, any new users will have to go to the VHF or UHF bands, which as NABER admits, are already crowded. This added demand on the VHF and UHF frequencies will only serve to increase any problems of channel sharing which currently exists, to the injury of existing users of those channels such as Dial Page.

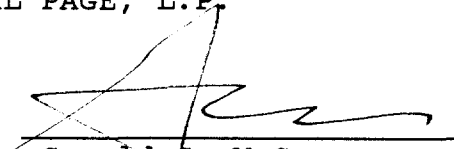
13. Dial Page understands and appreciates the Commission's desire to prompt full use of the 900 MHz PCP spectrum. However, Dial Page's concern is that awarding exclusive use of the PCP frequencies will prompt the application for and licensing of the spectrum, but not the use thereof. Therefore, Dial Page believes that adoption of the NABER proposal would be counterproductive to the long-term interests of the PCP industry and to the public interest. In sum, the NABER proposal should be rejected as unnecessary and counterproductive. Rather the solution to the frequency sharing problem is setting effective frequency sharing

rules and adequately enforcing them. That should be the focus of the Commission's approach to PCP.

Respectfully submitted,

DIAL PAGE, L.P.

By

A handwritten signature in dark ink, appearing to be "Gerald S. McGowan", written over a horizontal line.

Gerald S. McGowan
George L. Lyon, Jr.

Its Attorneys

Lukas, McGowan, Nace & Gutierrez,
Chartered
1819 H Street, NW, Suite 700
Washington, DC 20006
(202) 857-3500

June 10, 1992

EXHIBIT A

KING & CRATING VICE (Cont'd)

IN VAN LINES INC
Agent for Atlas Van Lines - Moving Over-
sight - Local Moving - Modern Storage
Port Royal Rd Springfield --- **703 321-7600**
Storage Company Of Washington --- **234-5608**
CITY STORAGE COMPANY OF
WILMINGTON
Ad Under Moving & Storage
Florida Av NW --- **234-5600**

PACKINGS-- MECHANICAL

HESTERTON SEALING DEVICES INDUSTRIAL TECHNICAL UNITS

DISTRIBUTORS
HESTERTON COMPANY
Zabover Drive Balto MD
Toll Free Dial "1" & Then --- **800 541-4856**

MOUNT PACKING & RUBBER INC

Mechanical Packings - "O" Rings
Gaskets - All Types & Materials
2 Belle Grove Rd --- **410 789-2233**

INDUSTRIAL PRODUCTS

is Braided With Distributors
Washington Blvd
more --- **410 796-2222**

PAGING & SIGNALING EQUIPMENT & SYSTEMS

ACE COMMUNICATIONS

PAGING & VOICE MAIL SERVICE
IMMEDIATE ACTIVATION
NO CREDIT HASSLE

Northern VA --- **703 758-2552**

AIR SIGNAL --- **990 196-5107**

AMERICAN MAIL BOX ETC

Pagers & Voice Mail - Western Union - Fax -
Copies - Business Cards - Shipping
7892 Georgia Av Silver Spring --- **301 589-5886**

American Paging
756 Transfer Rd
St Paul Mnn --- Washington Tel No --- **293-1614**

AMERICAN PAGING INC
4000 Blackburn Ln Burtonsville --- **301 421-0900**
(See Our Ad Page 1051)

PAGING & SIGNALING EQUIPMENT & SYSTEMS (Cont'd)

American Voice Mail Inc 2021 L St NW --- **785-9060**
American Voice Retrieval 2021 L St NW --- **331-1318**

BELL ATLANTIC PAGING

Sales
Toll Free-Dial "1" & Then --- **800 233-7669**
(See Our Ad Next Page)

Service
6000 Executive Blvd Rockville Md
Toll Free-Dial "1" & Then --- **800 562-5293**

CALL ME...STATEWIDE PAGING
14405 Laurel Pl Laurel --- **301 470-0000**

CELLULAR CITY
See Our Display Ad Under Mobile Telephone
Equipment & Systems
Washington DC --- **347-6000**

Telephone service isn't just
for the able-bodied. Your tele-
phone company has equipment to
make using the phone possible
for the hard of hearing, the
blind or paralyzed, and those
with voice impairments. Call
your telephone business
office for details.

PAGING & SIGNALING EQUIPMENT & SYSTEMS (Cont'd)

CUE PAGING CORP

**NATIONWIDE SATELLITE
PAGING**
**WIDE AREA PAGING &
VOICE MAIL**
301-459-3000

8201 Corporate Drive Landover --- **301 459-3000**

DJB COMMUNICATIONS

1110 4th St NW --- **789-2937**
(See Our Ad Page 1052)

EXECUTONE INFORMATION SYSTEMS INC

2700 Prosperity Av Fairfax --- **703 698-6200**

FIRST PAGE

We Feature Motorola Pagers
6180 Grovedale Ct Alexandria --- **703 922-2000**
(See Our Ad Page 1052)

KWIK KALL COMMUNICATIONS INC
5206 Minnick Rd Laurel --- **301 953-3313**
(See Our Ad Page 1052)

(Continued Next Page)

Advertising in the C&P YELLOW
PAGES tells Where To Buy
the product or service you want.
Use this handy Buyer's Guide. It
saves time and trouble. A Look In
The Book saves money and steps.

GO!

For instant savings from your favorite businesses



Green Pages
Coupons

C&P Telephone
A Bell Atlantic Company

YELLOW PAGES

Bell Atlantic Paging

Your Local Bell™ Paging Company

- Stay in touch wherever you travel throughout the Greater Washington-Baltimore metro area including Northern Virginia
- 24-hour, reliable paging service provided by C&P Telephone Company
- Highly trained sales consultants
- Personalized customer service
- Wide choice of affordable pagers
- Richmond and Tidewater coverage also available



Call Now & Get The New **Pocket Messenger™**

- Great for work or play
- Smaller, more compact than other pagers
- Available in a variety of fashion colors
- Quality built by Motorola

Toll Free

1 800 BEEP-NOW

Sales: 1 800 233-7669
Service: 1 800 562-5293

6000 Executive Blvd.
Suite 300
Rockville, MD



©Bell Atlantic
Paging

We're More Than Just Talk.

Metromedia Paging



A Southwestern Bell Company

Coverage

- Local
- Regional
- National & International SkyPager® Service

Service

- 35 Years of Unsurpassed Reliability
- 24 Hour Service

Full Product Line

- Alphanumeric—Gives Complete Messages
- Numeric—Displays Numbers
- VOICESTOR® Voice Mail Service

Price

- Lease/Purchase Options
- Major Credit Cards Accepted
- Quantity Discounts Available

TOLL FREE

800-437-2337

We feature quality pagers from Motorola



301-621-6161

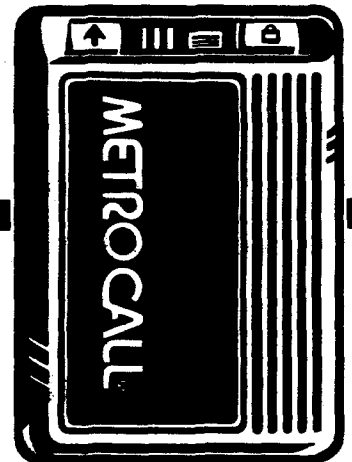
8150 Leesburg Pike
Vienna, VA 22182

9030 Rte. 108, Suite F
Columbia, MD 21045

THE POWER IN PAGING.sm

- Courteous, Efficient People Who Care
- Wide-area Coverage of the Entire Washington/Baltimore Area
- Regional Coverage from New York to Georgia
- Even Nationwide Paging
- Competitive Pricing

- All Types of Pagers
- Metromessagesm Voice Mail System
- Over 25 Years' Experience Keeping People In Touch
- Featuring State-Of-The-Art, Easy-To-Use Pagers From Motorola



METROCALL

6677 Richmond Hwy.
Alexandria, VA 22306-6677
(703) 660-9300

4041 Powder Mill Rd., Ste. 103
Beltsville, MD 20705
(301) 595-2755

14012-H Sullyfield Cir.
Charlottesville, VA 22021
(703) 378-9200

1531 S. Edgewood, Ste. M
Baltimore, MD 21227
(301) 644-2277



MobileComm
A BELL SOUTH Company

Why MobileComm?

The Nation's Leading Mobile
Communications Company

• Coverage

- Local and wide area
- Optional Regional Coverage Throughout the Northeast Including CT, NY, NJ, MA, VA and MD.

• Price

Flexible pricing & billing plans

• Service

A commitment, not just a department

• Products

- Voice Mail
- AlphaNumeric
- Tone Alert
- Digital Display
- **MESSAGE-SAVER[®]** Voice Messaging
- Complete cellular services also available

(301) 595-7444

4061 Powder Mill Rd., Calverton

(301) 659-0301

408 W. Lombard St., Baltimore

We sell & lease reliable Motorola Pagers

America's Largest Is The District of Columbia's Leader.

■ Complete Selection of Motorola
Pagers including the new Bravo
Lifestyle, Express and Plus, with
a Full Line of Colors to Choose
from.

■ PageMail® Voice Messaging
Service Available

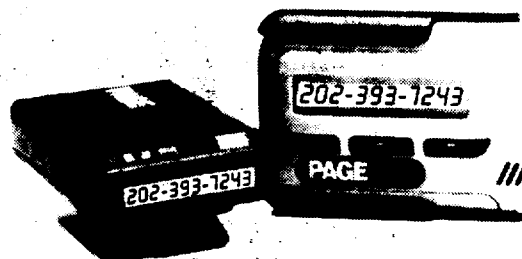
■ Optional East Coast &
Nationwide Coverage

■ Clear Wide-Area Coverage
Throughout the Greater
Washington, Baltimore, and
Virginia Metropolitan Areas

■ State-of-the-Art 900 MHz
Multi-Transmitter System

■ Low Monthly Rates and
Quantity Discounts

■ Free Pager Delivery by
Your Individual Account
Service Representative



MARYLAND
301-220-2525

VIRGINIA
703-734-5666

393-7243
PAGENET®

PAGING & SIGNALING EQUIPMENT & SYSTEMS (Cont'd)

MESSAGE CORP OF AMERICA
7611 Little River Turnpike ----- **703 750-9673**

MESSAGE WORLD INC.
Laurel
Washington Area Tel No. ----- **301 470-1122**

METRO - TONES INC.
Nationwide Paging Available
4401 East West Hwy Bethesda ----- **301 657-1414**

METROCALL
6677 Richmond Hwy Alex ----- **703 660-9300**
(See Our Ad Previous Page)

METROMEDIA PAGING
8150 Leesburg Pike Vienna VA
Toll Free-Dial "1" & Then ----- **800 437-2337**
(See Our Ad Page 1049)

MOBILECOMM
4061 Powdermill Rd Calverton ----- **301 595-7444**
(See Our Ad Previous Page)

PAGE ATLANTIC
Toll Free ----- **800 787-0333**
(See Our Ad Next Page)

PAGENET
9658 Baltimore Av College Park ----- **393-7243**
(See Our Ad This Page)

(Continued Next Page)

Make it a point not to start dial-
ing until you hear the familiar
hummm-m-m-m of the dial tone
that tells you the dial equip-
ment is ready to put your call
through.

**Paging
Baltimore-
Washington.
Paging
America.**

*Soaring to new heights
in customer satisfaction*

**AMERICAN
PAGING**
A Tradition in Paging Excellence



- All the product choices
you need
- All the services you want
- The extended coverage
you demand
- Ask us about our Customer
Satisfaction Guarantee

WASHINGTON, D.C.

301 421-0900

4000 Blackburn Ln., Suite 250, Burtonsville, MD

BALTIMORE

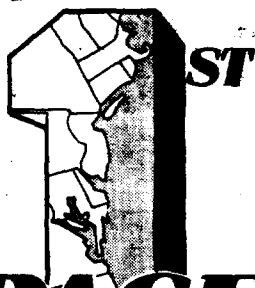
Suite 108
4600 Wilkens Ave. ----- **410 247-9400**

NORTHERN VIRGINIA

Suite 250
5400 Shawnee Rd ----- **703 941-0821**



LOOKING FOR PAGERS?
MAKE YOUR FIRST CALL TO



FirstPAGE
P · A · G · E · R · S

- COMPETITIVE PRICING • SYSTEM RELIABILITY
- LOCAL AND REGIONAL COVERAGE
- 900 MHZ TECHNOLOGY
- WE FEATURE MOTOROLA PAGERS
- SUBSTANTIAL CORPORATE DISCOUNTS
- SUPERIOR CUSTOMER SERVICE
- DIGITAL DISPLAY-ALPHANUMERIC-TONE

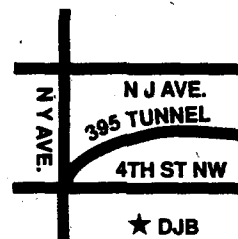
703-922-2000

PERSONAL PAGERS

D J B COMMUNICATIONS



- Digital Display-Alpha Numeric
- Extended East Coast Coverage
- Sales-Leasing-Rental
- Voice Mail
- Skypagers
- No Credit Check
- 900 MHZ
- Free Delivery



Featuring Motorola Products

"Evening Hours"



789-2937

1110 4TH ST NW



Fastest Beepers

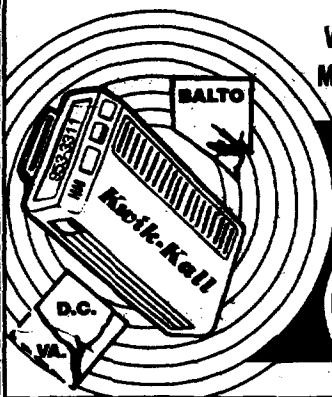
MESSAGE DELIVERED IN
5-19 SECONDS!

- FEATURING QUALITY EASY-TO-USE MOTOROLA PAGERS
- UHF WAVELENGTH PENETRATES BUILDINGS & ELEVATIONS
- VOICE PROMPTS PROVIDED FOR EASY USAGE
- FREE PICK-UP & DELIVERY FOR BEEPER MAINTENANCE

WIDE AREA COVERAGE INCLUDING
METRO WASHINGTON & BALTIMORE

Kwik Kall

(301) 953-3313



For Nationwide Coverage
In a Matter of Seconds,
Get the Preferred Pager

- Reaches You Instantly in Hundreds of Cities in the U.S. and Canada
- Message Delivery in Seconds-The Fastest of Any Nationwide System
- Reliable, High Quality Service

Washington
(202) 408-7444
1350 I Street NW
Toll Free
800-759-3375



SkyTel
SkyPager



Page Atlantic®
"Paging That Goes The Distance"



- SALES**
- NAME BRAND PAGERS
 - NEW & RECONDITIONED
 - AFFORDABLE PRICES
 - FREE DELIVERY

- SERVICE**
- NEW 931 Mhz SUPERSYSTEM
 - WIDE AREA COVERAGE
 - AFFORDABLE RATES
 - UNLIMITED CALLING

For Information or Free Demonstration

CALL 202-332-0797

OR CALL TOLL FREE 1-800-787-0333



PAGING & SIGNALING EQUIPMENT & SYSTEMS (Cont'd)

PERCE COMMUNICATIONS

NO CREDIT CHECK REQUIRED

WE WILL MEET OR BEAT
ANY ADVERTISED PRICE

DELIVERY SERVICE

Lanham 301 577-8300

RULE COMMUNICATIONS

HEAR YOUR CALLER'S VOICE
OVER YOUR PAGER!

Motorola Pagers - Buy or Rent

"WE HELP COPS BUST DRUG DEALERS!"
Oakton VA 703 391-9001

SKYTEL

1350 I St NW 408-7444

(See Our Ad Previous Page)

STATEWIDE PAGING

14405 Laurel Pl Laurel 301 470-0000

STRICTLY BUSINESS

BEEPERS
UNLIMITED CALLING
VIBRATING OPTIONS

TONE & VOICE • CAN HOLD UP TO 16 #s

291-7331

3115 Georgia Av NW 291-7331

Trent Electronic Communications
1101 Rhode Island Av NW 483-6276

PAGING & SIGNALING SERVICE—COMMON CARRIER

ACE COMMUNICATIONS

PAGING & VOICE MAIL SERVICE
IMMEDIATE ACTIVATION
NO CREDIT HASSLE

Northern VA 703 758-2552

Mobilecomm Of DC Inc 1019 19th St NW 659-4454

National Satellite Paging 1850 M St NW 452-1460

PAGENET

9658 Baltimore Av College Park 393-7243

PAIS

CANPAK INC

See Our Listing Under Cars

Toll Free-Dial "1" & Then 800 238-8400

PAIN CONTROL THERAPY

See "Acupuncturists"; "Massage
Therapists"

PAINT REMOVING

A TOTAL RENTAL CENTER INC

11200 Balto Blvd Beltsville 301 937-5670

A TOTAL RENTAL CENTER INC

11217 East Av Wheaton 301 933-4404

CHEM STRIP

Paint & Rust Removal Service

Metal & Solid Wood Stripping Any Size

8157 Penn Randall Pl
Upper Marlboro 301 420-9112

MANHATTAN PROPERTY CARE

Interior & Exterior - Lead Paint - Residential &
Commercial

108 Rittenhouse St NW 291-4817

MASTER BLASTERS

Historic - Commercial Masonry & Metal - Chemical

Stripping - Sandblasting - Since 1981

2740 Garfield Av Silver Spring 301 585-1788

VIRGINIA STRIPPER THE

WOOD STRIPPING

PICK-UP & DELIVERY

8466 Terminal Rd Newington 703 550-7323

PAINT—RETAIL

A & A Hardware Inc 6250 Chilm Pl NW 829-2000

A & C HARPERS PAINT

Dealer Of Sampson Coatings

Retail - Wholesale

Residential - Commercial - Industrial

PAINT - WALLCOVERING - FLOORING

ROOFING MATERIALS

COMPLETE LINE OF HARDWARE SUPPLIES

Advice To The Do-It-Yourselfers

1244 H Street NE 397-6883

BAR-KEN DISTRIBUTORS

The Largest Wholesale Distributor Of Bruning

Paints
931 Brentwood Rd NE 529-8600

PAINT—RETAIL (Cont'd)

BARCROFT PAINT & DECORATING CENTER

Cabot & Cuprinol Stain Dealers

6349C Columbia Pike
Falls Church 703 914-0220

BENJAMIN MOORE PAINTS

A COMPLETE LINE OF
QUALITY PAINTS

UNLIMITED COLORS
Used with confidence by
Homeowners, Painters, Architects, Decorators.

"See your Benjamin Moore Dealer—
He really knows his paint."

"WHERE TO BUY IT"

DEALERS

BARCROFT PAINT & DECORATING CENTER

6349C Columbia Pike
Falls Church 703 914-0220

CAPITOL PAINT CENTER INC

504 K St NW 628-8610

FAIRFAX PAINT & WALLPAPER

11000 Lee Hwy Fairfax 703 273-5030

MONARCH PAINT & WALL COVERING

2130 Wisconsin Av NW 625-2600

MONARCH PAINT & WALLCOVERING CO

5608 Conn Av NW 686-5550

MONARCH PAINT & WALLCOVERING CO

6300 Kenilworth Av Riverdale 301 779-4333

ROCKVILLE PAINT CENTER

500 Hungerford Dr Rockville 301 424-8555

SILVER SPRING PAINT & DECORATING CENTER

8211 Ga Av Sil Spg 301 589-2284

SUPERIOR PAINT & DECORATING CENTER

11409 Amherst Av Wheaton 301 946-0323

VIENNA PAINT & DECORATING COMPANY INC

203 Maple Av W Vienna 703 938-6115

WALDORF PAINT BUCKET INC

Waldorf MD
Oxon Hill Tel No 301 843-6325

PAINT—RETAIL (Cont'd)

BROOKLAND SERVISTAR HARDWARE

DURON & PITTSBURG PAINTS

Custom & Ready Mixed

Complete Line of Painting Supplies

3501 12th St NE 635-3200

BRUNING PAINTS

PAINT WITH
BRUNING AND THE
BEAUTY REMAINS
TO BE SEEN

Paints • Enamel
Varnishes
Specialty Finishes



"WHERE TO BUY IT"

DISTRIBUTOR-WASHINGTON

BAR-KEN DISTRIBUTORS

931 Brentwood Rd NE 529-8600

DISTRIBUTOR-MARYLAND

ANNAPOLIS PAINT COMPANY

1605 West St Annapolis 410 263-0614

DEALERS

POTOMAC PAINT COMPANY

Computer Color Matching Available

5719 Lee Hwy Arlington 703 536-4770

POTOMAC PAINT COMPANY

Computer Color Matching Available

6414 Old Branch Av
Camp Springs Md 301 449-7606

STROSNIDER'S KEMP MILL PAINT & HARDWARE

1386 Lambertson Dr Silver Spring 301 593-5353

WATKINS F L CO INC

5701 Martin Luther King Jr Hwy
Seat Pleasant MD - Washington Tel No 396-6300

BUTLER—FLYNN PAINT CO INC

The House Of Custom Color
Coronado Paints - Masury Paints
McCloskey Varnishes-Wooster Brushes
Sundries Our Specialty
Government Specification Paints
Founded 1845
Bethesda - Chevy Chase

7029 Wisc Av Beth 301 652-1933

CAMPBELL M L PROFESSIONAL LACQUER FINISHES

PAINT SHOP THE

16516 South Westland Dr Gaithersburg 301 258-1144

CAPITOL PAINT CENTER INC

504 K St NW 628-8610

(See Our Ad Next Page)

CHRISTOPHER'S GLEN ECHO HARDWARE

7303 MacArthur Blvd Bethesda 301 229-3700

COLOR CENTER

4901 Cordell Av Beth 301 656-3435

COMMUNITY HARDWARE

Keys - Glass - Paint
Crystal City Area
529 23d S Arl 703 979-5555

COOPER HARDWARE INC

Paints & Wallcoverings

Major Credit Cards Accepted

3459 14th St NW 387-0808

Cooper Hardware Inc 3459 14th St NW 387-0808

DAMASCUS PAINT & DECORATING CENTER

Damascus Ctr Damascus 301 924-3598

(Continued Next Page)

Call your C&P business office
for YELLOW PAGES directories.

Find 'Where to Buy It' in the
C&P Yellow Pages.

The C&P Yellow Pages and your
phone can help you save time
and gas. Read the C&P Yellow
Pages ads to find the stores
nearest you and when they
are open. Call ahead to find
what you need.

For A GOOD Catch...

Fish
The Bell Atlantic
Yellow Pages

© Bell Atlantic

Get the habit of shopping with the
aid of the C&P Yellow Pages.
They'll save you time,
trouble, and money.

EXHIBIT B

F R E Q U E N C Y S E A R C H R E S U L T S

Page 1

FCC Staff Study List as of: April 1, 1992

06-09-92 16:21

Search Frequencies: 900MHz

Search Area #1: Washington, DC (WshDC)
20 mile radius of 38°[53'51"N.Lat 77°[00'33"W.Long
(From 38°[06'27" 76°[08'17" To 39°[41'15" 77°[52'49")

Longitude	Latitude	State	CallSign	Status	Grant	PN/ExpDt	Distance & Bearing
Applicant/Licensee					File Number		WshDC

***** 931.0000 MHz *****

77.04.16	38.55.50	DC		PEND		04/18/90	4.0
PAGE AMERICA OF NEW YORK, INC.					23479-CD-P/L-(01)-90		304.3°[
77.07.21	38.50.46	VA		PEND		09/27/89	7.1
PACTEL PAGING					31616-CD-P/L-(01)-89		239.9°[
77.13.38	38.54.57	VA		PEND		09/27/89	11.8
PACTEL PAGING					31616-CD-P/L-(01)-89		276.1°[

***** End of 931.0000 MHz *****
3 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 4.0
Number of matching records: 3

***** 931.0125 MHz *****

76.48.34	38.48.16	MD	KOR798	AUTH	05/31/89	04/01/99	12.5
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		120.8°[
76.54.06	38.37.48	MD	KOR798	AUTH	05/31/89	04/01/99	19.3
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		162.5°[
77.00.18	38.57.17	DC	KOR798	AUTH	05/31/89	04/01/99	4.0
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		3.3°[
77.01.54	38.53.47	DC	KOR798	AUTH	05/31/89	04/01/99	1.2
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		266.4°[
77.04.51	38.46.24	VA	KOR798	AUTH	05/31/89	04/01/99	9.4
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		204.3°[
77.08.15	38.48.50	VA	KOR798	AUTH	05/31/89	04/01/99	9.0
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		230.2°[
77.08.04	38.53.44	VA	KOR798	AUTH	05/31/89	04/01/99	6.8
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		268.9°[

F R E Q U E N C Y S E A R C H R E S U L T S

Page 2

FCC Staff Study List as of: April 1, 1992

06-09-92 16:21

Longitude Applicant/Licensee	Latitude	State	CallSign	Status	Grant File Number	PN/ExpDt	Distance & Bearing WshDC
---------------------------------	----------	-------	----------	--------	----------------------	----------	-----------------------------

***** 931.0125 MHz (Cntd) *****

77.08.58	39.04.56	MD	KOR798	AUTH	05/31/89	04/01/99	14.8
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		329.30[

77.13.45	38.55.20	VA	KOR798	AUTH	05/31/89	04/01/99	12.0
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		278.20[

77.21.18	38.57.00	VA	KOR798	AUTH	05/31/89	04/01/99	19.0
METROCALL OF DELAWARE, INC					22089-CD-ML-(01)-92		281.00[

***** End of 931.0125 MHz *****
10 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 1.2
Number of matching records: 10

***** 931.0625 MHz *****

77.07.21	38.50.46	VA	KNKL416	AUTH	12/22/88	12/22/89	7.1
PACTEL PAGING					22704-CD-P/L-(01)-90		239.90[

77.13.38	38.54.57	VA	KNKL416	AUTH	12/22/88	12/22/89	11.8
PACTEL PAGING					22704-CD-P/L-(01)-90		276.10[

***** End of 931.0625 MHz *****
2 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 7.1
Number of matching records: 2

***** 931.1125 MHz *****

76.41.23	38.52.33	MD	KNKK284	AUTH	05/28/87	05/28/88	17.3
SOUTHLAND HOLDINGS, INC.					23549-CD-P/L-(01)-84		95.00[

76.52.23	39.07.46	MD	KNKK284	AUTH	10/17/91	04/01/99	17.6
SOUTHLAND HOLDINGS, INC.					20798-CD-ML-(01)-92		24.60[

77.01.46	38.59.47	MD	KNKK284	AUTH	05/28/87	05/28/88	6.9
SOUTHLAND HOLDINGS, INC.					23549-CD-P/L-(01)-84		350.90[

77.04.16	38.55.50	DC	KNKG360	AUTH	11/15/85	11/15/86	4.0
ALPINE PARTNERS					23409-CD-P/L-(01)-83		304.30[

F R E Q U E N C Y S E A R C H R E S U L T S

Page 3

FCC Staff Study List as of: April 1, 1992

06-09-92 16:21

Longitude Applicant/Licensee	Latitude	State	CallSign	Status	Grant File Number	PN/ExpDt	Distance & Bearing WshDC
---------------------------------	----------	-------	----------	--------	----------------------	----------	-----------------------------

***** 931.1125 MHz (Cntd) *****

77.08.58	39.04.56	MD	KNKK284	AUTH	05/28/87	05/28/88	14.8
SOUTHLAND HOLDINGS, INC.							329.3⊙[
23549-CD-P/L-(01)-84							

77.21.20	38.56.58	VA	KNKK284	AUTH	05/28/87	05/28/88	19.0
SOUTHLAND HOLDINGS, INC.							280.9⊙[
23549-CD-P/L-(01)-84							

***** End of 931.1125 MHz *****
6 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 4.0
Number of matching records: 6

***** 931.1375 MHz *****

77.00.47	38.52.55	DC	KNKO246	AUTH	08/13/91	08/13/92	1.1
HENRY M. ZACHS							191.1⊙[
22452-CD-P/L-(01)-91							

77.02.29	38.53.56	DC	KNKO246	AUTH	08/12/91	08/12/92	1.7
HENRY M. ZACHS							273.2⊙[
22450-CD-P/L-(01)-91							

77.06.57	38.50.41	VA	KNKO247	AUTH	08/13/91	08/13/92	6.8
HENRY M. ZACHS							237.7⊙[
22449-CD-P/L-(01)-91							

77.08.58	39.04.56	MD	KNKL392	AUTH	02/13/90	02/13/91	14.8
HENRY M. ZACHS							329.3⊙[
31936-CD-P/ML-(01)-89							

77.09.31	39.04.55	MD	KNKL392	AUTH	02/22/91	04/01/99	15.1
HENRY M. ZACHS							327.7⊙[
23197-CD-ML-(01)-91							

77.13.45	38.55.20	VA	KNKO247	AUTH	08/12/91	08/12/92	12.0
HENRY M. ZACHS							278.2⊙[
22451-CD-P/L-(01)-91							

***** End of 931.1375 MHz *****
6 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 1.1
Number of matching records: 6

F R E Q U E N C Y S E A R C H R E S U L T S

Page 4

FCC Staff Study List as of: April 1, 1992

06-09-92 16:21

Longitude Applicant/Licensee	Latitude	State	CallSign	Status	Grant File Number	PN/ExpDt	Distance & Bearing WshDC
---------------------------------	----------	-------	----------	--------	----------------------	----------	-----------------------------

***** 931.1625 MHz *****

77.13.38	38.54.57	VA	KNKM363	AUTH	04/17/91	07/01/98	11.8
AMERICAN PAGING, INC.					24442-CD-ML-(01)-91		276.10[

***** End of 931.1625 MHz *****
1 matching record within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 11.8
Number of matching records: 1

***** 931.1875 MHz *****

77.01.56	38.54.05	DC	KNKM815	PEND		10/16/91	1.3
SNET PAGING, INC.					29260-CD-P/ML-(01)-91		282.20[

77.04.16	38.55.50	DC	KNKM815	PEND		01/22/92	4.0
SNET PAGING, INC.					22519-CD-P/ML-(01)-92		304.30[

***** End of 931.1875 MHz *****
2 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 1.3
Number of matching records: 2

***** 931.2125 MHz *****

76.41.23	38.52.33	MD	KNKK485	AUTH	11/06/90	04/01/99	17.3
METRO-TONES, INC.					27841-CD-R-(01)-89		95.00[

77.00.15	38.57.18	DC	KNKL866	AUTH	03/16/89	11/16/89	4.0
METRO-TONES, INC					31837-CD-P/ML-(01)-89		3.90[

77.00.15	38.57.18	DC	KNKK485	AUTH	07/29/87	07/29/88	4.0
METRO-TONES, INC.					24164-CD-P/L-(01)-87		3.90[

77.04.21	38.55.56	DC	KNKK485	AUTH	11/06/90	04/01/99	4.2
METRO-TONES, INC.					27841-CD-R-(01)-89		305.10[

77.06.44	39.02.48	MD	KNKK485	AUTH	11/06/90	04/01/99	11.7
METRO-TONES, INC.					27841-CD-R-(01)-89		331.70[

77.07.04	38.49.58	VA	KNKK485	AUTH	11/06/90	04/01/99	7.4
METRO-TONES, INC.					27841-CD-R-(01)-89		232.70[

F R E Q U E N C Y S E A R C H R E S U L T S

Page 5

FCC Staff Study List as of: April 1, 1992

06-09-92 16:21

Longitude Applicant/Licensee	Latitude	State	CallSign	Status	Grant File Number	PN/ExpDt	Distance & Bearing WshDC
---------------------------------	----------	-------	----------	--------	----------------------	----------	-----------------------------

***** 931.2125 MHz (Cntd) *****

77.07.04	38.49.58	VA	KNKM478	AUTH	06/11/90	04/01/99	7.4
METRO-TONES, INC OF VIRGINIA					30548-CD-P/ML-(01)-89		232.70[

***** End of 931.2125 MHz *****

7 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 4.0
Number of matching records: 7

***** 931.2375 MHz *****

76.58.48	38.48.19	MD	KNKE206	AUTH	02/13/90	02/13/91	6.6
					21387-CD-P/ML-(01)-90		166.10[

RAM COMMUNICATIONS OF MASSACHUSETTS INC

77.04.16	38.55.50	DC	KNKE206	AUTH	05/15/90	04/01/99	4.0
RAM COMMUNICATIONS OF MASSACHUSETTS INC					25869-CD-R-(01)-89		304.30[

77.07.04	38.49.58	VA	KNKE206	AUTH	02/13/90	02/13/91	7.4
					21387-CD-P/ML-(01)-90		232.70[

RAM COMMUNICATIONS OF MASSACHUSETTS INC

77.21.20	38.57.00	VA	KNKE206	AUTH	02/13/90	02/13/91	19.0
					21387-CD-P/ML-(01)-90		281.00[

RAM COMMUNICATIONS OF MASSACHUSETTS INC

***** End of 931.2375 MHz *****

4 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 4.0
Number of matching records: 4

***** 931.2625 MHz *****

77.02.16	38.54.40	DC	KNKM358	AUTH	04/17/90	04/17/91	1.8
AULT, PHILLIP					28598-CD-P/L-(01)-89		301.30[

***** End of 931.2625 MHz *****

1 matching record within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 1.8
Number of matching records: 1

F R E Q U E N C Y S E A R C H R E S U L T S

Page 6

FCC Staff Study List as of: April 1, 1992

06-09-92 16:21

Longitude Applicant/Licensee	Latitude	State	CallSign	Status	Grant File Number	PN/ExpDt	Distance & Bearing WshDC
---------------------------------	----------	-------	----------	--------	----------------------	----------	-----------------------------

***** 931.2875 MHZ *****

76.41.23	38.52.33	MD	KNKE387	AUTH	11/13/91	04/01/99	17.3
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							95.00[

76.48.06	38.46.19	MD	KNKE387	AUTH	11/13/91	04/01/99	14.2
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							127.70[

76.52.56	38.59.30	MD	KNKE387	AUTH	03/08/89	03/08/90	9.4
PAGING NETWORK OF WASHINGTON, INC. 26728-CD-P/ML-(01)-89							46.50[

76.58.50	38.48.14	MD	KNKE387	AUTH	11/13/91	04/01/99	6.6
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							166.60[

76.59.35	38.50.55	DC	KNKE387	AUTH	11/13/91	04/01/99	3.5
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							165.60[

77.00.25	38.56.20	DC	KNKE387	AUTH	11/13/91	04/01/99	2.9
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							2.40[

77.00.18	38.57.17	DC	KNKE969	AUTH	12/30/86	12/30/87	4.0
CHRONICLE TELECOM 20787-CD-P/L-(01)-87							3.30[

77.02.24	38.54.30	DC	KNKE387	AUTH	11/13/91	04/01/99	1.8
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							294.20[

77.03.27	38.59.59	MD	KNKE387	AUTH	03/08/89	03/08/90	7.5
PAGING NETWORK OF WASHINGTON, INC. 26728-CD-P/ML-(01)-89							339.70[

77.03.13	38.51.38	VA	KNKE387	AUTH	11/13/91	04/01/99	3.5
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							223.20[

77.03.48	38.50.03	VA	KNKE387	AUTH	11/13/91	04/01/99	5.3
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							213.80[

77.04.26	38.55.32	DC	KNKE387	AUTH	03/08/89	03/08/90	4.0
PAGING NETWORK OF WASHINGTON, INC. 26728-CD-P/ML-(01)-89							299.00[

77.04.16	38.55.50	DC	KNKE969	AUTH	11/15/85	11/15/86	4.0
CHRONICLE TELECOM 22861-CD-P/L-(01)-83							304.30[

77.05.52	38.59.24	MD	KNKE387	AUTH	11/13/91	04/01/99	8.0
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							323.20[

77.06.55	38.52.55	VA	KNKE387	AUTH	11/13/91	04/01/99	5.8
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							259.40[

77.08.58	39.04.56	MD	KNKE387	AUTH	11/13/91	04/01/99	14.8
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							329.30[

77.10.42	38.46.35	VA	KNKE387	AUTH	11/13/91	04/01/99	12.4
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							227.50[

F R E Q U E N C Y S E A R C H R E S U L T S

Page 7

FCC Staff Study List as of: April 1, 1992

06-09-92 16:21

Longitude Applicant/Licensee	Latitude	State	CallSign	Status	Grant File Number	PN/ExpDt	Distance & Bearing WshDC
---------------------------------	----------	-------	----------	--------	----------------------	----------	-----------------------------

***** 931.2875 MHz (Cntd) *****

77.13.45	38.55.20	VA	KNKE387	AUTH	03/08/89	03/08/90	12.0
PAGING NETWORK OF WASHINGTON, INC. 26728-CD-P/ML-(01)-89							278.20[

77.20.12	38.51.25	VA	KNKE387	AUTH	11/13/91	04/01/99	17.9
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							261.00[

77.21.20	38.57.00	VA	KNKE387	AUTH	11/13/91	04/01/99	19.0
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							281.00[

***** End of 931.2875 MHz *****
20 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 1.8
Number of matching records: 20

***** 931.3125 MHz *****

77.04.26	38.55.38	DC	KNKF852	AUTH	11/15/85	11/15/86	4.0
MOBILE/COMM OF D.C. INC. 23434-CD-P/L-(01)-83							300.40[

77.10.42	38.46.35	VA	KNKE387	AUTH	11/13/91	04/01/99	12.4
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							227.50[

77.21.20	38.57.00	VA	KNKE387	AUTH	11/13/91	04/01/99	19.0
PAGING NETWORK OF WASHINGTON, INC. 22133-CD-ML-(01)-92							281.00[

77.04.16	38.55.50	DC	KNKG629	AUTH	11/15/85	11/15/86	4.0
22158-CD-P/L-(01)-83							304.30[

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY

***** End of 931.3125 MHz *****
4 matching records within the requested search area

Summary of search results-- Search: WshDC
Closest matching record: 4.0
Number of matching records: 4

***** 931.3375 MHz *****

77.00.18	38.57.17	DC	KNKG388	AUTH	02/13/90	02/13/91	4.0
LEHIGH COMMUNICATIONS, INC. 21226-CD-P/ML-(01)-90							3.30[

77.04.16	38.55.50	DC		PEND		02/05/92	4.0
DIAL PAGE, INC. 22732-CD-P/L-(01)-92							304.30[